



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,484	03/01/2004	Dean A. Wieting	790063.00005	9521

26710 7590 09/22/2004

QUARLES & BRADY LLP  
411 E. WISCONSIN AVENUE  
SUITE 2040  
MILWAUKEE, WI 53202-4497

EXAMINER

DEUBLE, MARK A

ART UNIT	PAPER NUMBER
----------	--------------

3651

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/790,484

Applicant(s)

WIETING ET AL.

Examiner

Mark A. Deuble

Art Unit

3651

*MW*

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-19 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/14/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3,6, 12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Henson et al. (U.S. patent no. 6,044,956).

Henson et al. shows a roller top conveyor chain assembly 10 comprising first and second strands of conveyor chains 20 formed by a plurality of link assemblies. The first and second strands of conveyor chains are arranged substantially parallel to each other for cooperatively conveying an object together. A first roller support frame 32 having a top wall with a plurality of upwardly opening cavities formed therein extends between the first and second link assemblies. The first and second ends of the roller frames are fixed to the first and second link assemblies via apertures 42 and snap fit assemblies 44. Furthermore, while the first and second link assemblies do not have a flat metal piece forming a flight as it is illustrated in the present invention, the ends of the pins extending inwardly from the link assemblies may be viewed as forming flights extending toward the other link assemblies to which the ends of the roller frame are fixed when the word flight is given a broad reasonable interpretation. Rollers 30 are mounted in each of the cavities for engaging the object being conveyed by the first and second strands of conveyor chain. Each of the rollers includes a 36 that is parallel to the first and second

Art Unit: 3651

strands of the conveyor chain. Thus, Henson et al. shows all the structure required by claims 1-3, 6, 12, and 14.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6, 11-14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henson et al. in view of Yoshimura et al. (U.S. patent no. 5,265,715).

Henson shows generally all that is required by the claims except for the third strand of conveyor chain link assemblies required by claims 4, 11, 13, and 19. However, Yoshimura et al. teaches that the width of a roller top conveyor chain assembly may be extended by providing a third strand of conveyor chain link assemblies substantially parallel to the other link assemblies so that an additional row of rollers may be mounted between the second and third strands of conveyor chain link assemblies. Therefore, it would have been obvious to provide a third strand of conveyor chain link assemblies parallel to the other strands of conveyor chain link assemblies and to mount a second roller support frame with rollers mounted in the apertures of the second support frame in the conveyor of Henson et al. in order to expand the width of the conveyor as taught by Yoshimura et al. When this is done, the resulting conveyor would have all the structure required by claims 1-4, 6, 11-14, and 19.

Art Unit: 3651

5. Claims 1-6, 11-14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henson et al. in view of Yoshimura et al. as applied to claims 1-4, 6, 11-14, and 19 above, and further in view of Rauenbuehler (U.S. Patent No. 3,053,376).

Henson et al. as modified in view of Yoshimura et al. shows generally all the structure required by the claims except for the flight extending from one each link assembly toward the adjacent link assembly as required by claim 5. However, Rauenbuehler shows a roller top conveyor chain assembly with strands of conveyor chain link assemblies having flights extending from the link members 24 toward the other chain link assemblies. The flights provide a simplified means of attaching roller support frames 25 to the chain link assemblies. Therefore, it would have been obvious to provide flights of the type shown in Rauenbuehler to each of the chain link strands in the conveyor of Henson et al. as modified in view of Yoshimura et al. above to provide a simplified means of attaching the roller support frames between the strands of chain link assemblies as taught by Rauenbuehler. When this is done, the resulting conveyor would have all the structure required by claims 1-6, 11-14, and 19.

6. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henson et al. in view of Yoshimura et al. and Rauenbuehler as applied to claims 1-6, 11-14, and 19 above, and further in view of Costanzo (U.S. Patent No. 6,494,312).

Henson et al., modified in the fashion described above, would have all the structure required by the claims except for the ball roller assemblies fixed to the roller support frame of claims 7-8 and 15-16 and the roller with an axis of rotation defining an angle greater than 0° or approximately 90° to form the low back pressure conveyor chain assembly of claims 9-10 and 17-18. However, Costanzo teaches that ball roller assemblies mounted on a roller support frame

Art Unit: 3651

(as illustrated in Figs. 7-8) and rollers having an axis of rotation of approximately  $90^\circ$  to form a low back pressure conveyor chain assembly (as illustrated in Figs. 1-2) may be used interchangeably with the rollers having an axis of rotation parallel to the strands of the conveyor chain (illustrated in Figs. 4-6). Therefore it would have been obvious to modify the structure described above by replacing the rollers having an axis of rotation parallel to the strands of the conveyor chain with ball roller assemblies mounted on a roller support frame or rollers having an axis of rotation of approximately  $90^\circ$  to form a low back pressure conveyor chain assembly as taught by Costanzo. When this is done, the resulting conveyor would have all the structure required by claims 1-19.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Leahey et al., Hodlewsky, and the British document all show roller top conveyor chains similar to that of the present invention.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (703) 305-9734. The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher P Ellis can be reached on (703) 308-2560. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md



EILEEN D. LILLIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600